



CONTENTS OF VOLUME 160

Vol. 160B, No. 1

General papers

- | | |
|--|--|
| A. Dolashki, W. Voelter and P. Dolashka | 1 Phenoloxidase activity of intact and chemically modified functional unit RvH1-a from molluscan <i>Rapana venosa</i> hemocyanin |
| A.J. White, M.J. Northcutt, S.E. Rohrbach, R.O. Carpenter, M.M. Niehaus-Sauter, Y. Gao, M.G. Wheatly and C.M. Gillen | 8 Characterization of sarcoplasmic calcium binding protein (SCP) variants from freshwater crayfish <i>Procambarus clarkii</i> |
| C. Infante, M. Ponce, E. Asensio, R. Zerolo and M. Manchado | 15 Molecular characterization of a novel type II keratin gene (<i>sseKer3</i>) in the Senegalese sole (<i>Solea senegalensis</i>): Differential expression of keratin genes by salinity |
| K.C. Silva Firmino, R.O. Faleiros, D.C. Masui, J.C. McNamara and R.P.M. Furriel | 24 Short- and long-term, salinity-induced modulation of V-ATPase activity in the posterior gills of the true freshwater crab, <i>Dilocarcinus pagei</i> (Brachyura, Trichodactylidae) |
| G. Wu, H. Zhang, J. Sun, F. Liu, X. Ge, W.-H. Chen, J. Yu and W. Wang | 32 Diverse <i>LEA</i> (late embryogenesis abundant) and <i>LEA-like</i> genes and their responses to hypersaline stress in post-diapause embryonic development of <i>Artemia franciscana</i> |
| G.E. Canepa, C. Carrillo, M.R. Miranda, M. Sayé and C.A. Pereira | 40 Arginine kinase in <i>Phytomonas</i> , a trypanosomatid parasite of plants |
| S.M. Linton and A.J. Shirley | 44 Isozymes from the herbivorous gecarcinid land crab, <i>Gecarcoidea natalis</i> that possess both lichenase and endo- β -1,4-glucanase activity |
| M. Suda, Y. Uno, J. Fujii, Y. Matsuda and M. Nakamura | 54 Isolation and characterization of the <i>CYP17A1</i> gene and its processed pseudogene in <i>Rana rugosa</i> |

Vol. 160B, No. 2-3

Announcement

- | | |
|---|--|
| M.S. Gordon, H.H. Hoppeler, J.R. Speakman and T. Wang | 63 IUPS 2013 – Invitation to contribute to interest, significance, diversity and balance in the scientific program for the 37th International Congress of Physiological Sciences |
|---|--|

General papers

- | | |
|---|---|
| H. Ozawa, S. Watabe and Y. Ochiai | 64 Thermodynamic characterization of muscle tropomyosins from marine invertebrates |
| T.M. Rodela, A.J. Esbaugh, M.D. McDonald, K.M. Gilmour and P.J. Walsh | 72 Evidence for transcriptional regulation of the urea transporter in the gill of the Gulf toadfish, <i>Opsanus beta</i> |
| T. Tang, D.-w. Huang, D. Zhang, Y.-j. Wu, R.W. Murphy and F.-s. Liu | 81 Identification of two metallothionein genes and their roles in stress responses of <i>Musca domestica</i> toward hyperthermy and cadmium tolerance |

Contents of volume

- R. Matsuo, S. Kobayashi, F. Morishita and E. Ito** 89 Expression of Asn-d-Trp-Phe-NH₂ in the brain of the terrestrial slug *Limax valentianus*
- S. Vázquez-Dorado, A. Sanjuan, Á.S. Comesaña and A. de Carlos** 94 Identification of octopine dehydrogenase from *Mytilus galloprovincialis*
- D.-J. Kim, I. Kawazoe, J.-H. Jung, C.-M. An, Y.-C. Kim and K. Aida** 104 Purification and characterization of luteinizing hormone from pituitary glands of rockfish, *Sebastes schlegelii*
- S.D. Kirkton, E.T. Nyberg and K.M. Fox** 110 Ontogenetic changes in citrate synthase and lactate dehydrogenase activity in the jumping muscle of the American locust (*Schistocerca americana*)
- Obituary**
- W.R. Driedzic** 117 My journey with Bruce Sidell
- W.R. Driedzic, J.M. Shick and G.N. Somero** 119 Bruce D. Sidell (20 March 1948–8 February 2011)
- Erratum**
- M. Aldeco, B.K. Arslan and D.E. Edmondson** 122 Erratum to "Catalytic and inhibitor binding properties of zebrafish monoamine oxidase (zMAO): Comparisons with human MAO A and MAO B" [Comp. Biochem. Physiol. Part B 159 (2011) 78–83]
- Vol. 160B, No. 4
- Review**
- S. Polakof, T.P. Mommsen and J.L. Soengas** 123 Glucosensing and glucose homeostasis: From fish to mammals
- General papers**
- R. Yossa, P.K. Sarker, S. Karanth, M. Ekker and G.W. Vandenberg** 150 Effects of dietary biotin and avidin on growth, survival, feed conversion, biotin status and gene expression of zebrafish *Danio rerio*
- M. Li, S.K. Russell, J.S. Lumsden and J.F. Leatherland** 159 The influence of oocyte cortisol on the early ontogeny of intelectin and TLR-5, and changes in lysozyme activity in rainbow trout (*Oncorhynchus mykiss*) embryos
- H. Fällmar, G. Sundström, I. Lundell, N. Mohell and D. Larhammar** 166 Neuropeptide Y/peptide YY receptor Y2 duplicate in zebrafish with unique introns displays distinct peptide binding properties
- T. Yamada, H. Donai, M. Okauchi, M. Tagawa and K. Araki** 174 Induction of ambicoloration by exogenous cortisol during metamorphosis of spotted halibut *Verasper variegatus*
- A. Laino, M.L. Cunningham, H. Heras and F. Garcia** 181 In vitro lipid transfer between lipoproteins and midgut-diverticula in the spider *Polybetes pythagoricus*
- W. Jiang, Y. Yang, D. Zhao, X. Liu, J. Duan, S. Xie and H. Zhao** 187 Effects of sexual steroids on the expression of *foxl2* in *Gobiocypris rarus*
- M.V. Savina, S.A. Konovalova, I.S. Zubatkina and A.A. Nikiforov** 194 Reversible metabolic depression in lamprey hepatocytes during prespawning migration: Dynamics of mitochondrial membrane potential
- M.Y. Pasquevich, M.S. Dreon, S. Lavarías and H. Heras** 201 Triacylglycerol catabolism in the prawn *Macrobrachium borellii* (Crustacea: Palaemoniade)
- Q. Ma, S.-F. Liu, Z.-M. Zhuang, Z.-Z. Sun, C.-L. Liu, Y.-Q. Su and Q.-S. Tang** 208 Molecular cloning, expression analysis of insulin-like growth factor I (IGF-I) gene and IGF-I serum concentration in female and male Tongue sole (*Cynoglossus semilaevis*)
- Obituary**
- N. Terwilliger and R. Henry** 215 David W. Towle 1941–2011

I Contents of Volume

IV Subject Index

V Author Index

SUBJECT INDEX

Vol. 160, Nos. 4

1,4- β -D-glucan glucohydrolase, 44

Adult type pigment cell, 174

Alternative splicing, 8

Ambicoloration, 174

Artemia franciscana, 32

Avidin-biotin, 150

Cadmium, 81

Cellulase, 44

Cellulose, 44

Circular dichroism, 64

Cold, 8

Cortisol, 72, 174

Crustacean, 201

Crustacean gill microsomes, 24

CYP17A1, 54

Danio rerio, 150

dct, 174

Differential scanning calorimetry, 64

Endo- β -1,4-glucanase, 44

Enzymatic activity, 94

Enzyme, 110

Enzyme activation, 1

Expression pattern, 187

Fatty acid, 201

Fish, 123

FISH, 54

Food intake, 123

foxl2, 187

foxl2b, 187

Functional unit, 1

Gecarcoidea natalis, 44

Gene duplication, 166

Gene expression, 150

Giant neuron, 89

Glucocorticoid receptor, 72

Glucocorticoid response element (GRE), 72

Glucocorticoids, 159

Glucose homeostasis, 123

Glucosensing, 123

Gobiocypris rarus, 187

Gonadotropin, 104

Grasshopper, 110

Growth, 150

Heat shock, 81

Hemicellulose, 44

Hemocyanin, 181

Hepatocytes, 194

Hydrophilic protein, 32

Hypersaline stress, 32

IGF-I, 208

Insect, 110

Insulin secretion, 123

Intelectin, 159

Intraspecific, 110

Jatropha macrantha, 40

Keratin, 15

Kinetic characterization, 24

Lamprey, 194

Land crabs, 44

Late embryogenesis abundant, 32

Leishmania, 40

Lichenase, 44

Limax, 89

Lipase, 201

Lipid metabolism, 201

Lipid transfer, 181

Lipoprotein, 181

Luciferase assay, 54

Luteinizing hormone, 104

Lysozyme, 159

Marine invertebrates, 94

Medaka, 166

Melanoblast, 174

Metallothionein, 81

Metamorphosis, 15

Metyrapone, 72

Midgut-diverticula, 181

Mineralocorticoid receptor, 72

Mitochondrial membrane potential, 194

mRNA expression, 208

Musca domestica, 81

Muscle, 8

NdWamide, 89

NPY-receptor, 166

Ontogeny, 159

Opine dehydrogenases, 94

Osmoregulation, 15, 24

Peptide YY, 166

Phenoloxidase activity, 1

Phosphagen, 40

Phosphagen kinases, 40

Phylogenetic analysis, 94

Pituitary gland, 104

Post-diapause embryos, 32

Prespawning migration, 194

Processed pseudogene, 54

Protein purification, 94

Rana rugosa, 54

Rapana venosa hemocyanin, 1

RNAi, 8

Rockfish, 104

Scaling, 110

Sebastes schlegeli, 104

Senegalese sole, 15

Sex determination and sex differentiation, 187

Sexually dimorphic growth, 208

Slug, 89

Spider, 181

Stress response, 81

Survival, 150

Thermostability, 64

Thyroid hormones, 15

TLR-5, 159

Toadfish urea transporter (tUT), 72

Tongue sole, 208

Triacylglycerol, 201

Tropomyosin, 64

True freshwater crab, 24

Trypanosoma, 40

V-ATPase, 24

Viviparity, 104

Zebrafish, 166

AUTHOR INDEX Vol. 160B, Nos. 1-4

- Aida, K., 104
 Aldeco, M., 122
 An, C.-M., 104
 Araki, K., 174
 Arslan, B.K., 122
 Asensio, E., 15
- Canepa, G.E., 40
 Carpenter, R.O., 8
 Carrillo, C., 40
 Chen, W.-H., 32
 Comesaña, Á.S., 94
 Cunningham, M.L., 181
- de Carlos, A., 94
 Dolashka, P., 1
 Dolashki, A., 1
 Donai, H., 174
 Dreon, M.S., 201
 Driedzic, W.R., 117
 Driedzic, W.R., 119
 Duan, J., 187
- Edmondson, D.E., 122
 Ekker, M., 150
 Esbaugh, A.J., 72
- Faleiros, R.O., 24
 Fällmar, H., 166
 Firmino, K.C.S., 24
 Fox, K.M., 110
 Fujii, J., 54
 Furriel, R.P.M., 24
- Gao, Y., 8
 Garcia, F., 181
 Ge, X., 32
 Gillen, C.M., 8
 Gilmour, K.M., 72
 Gordon, M.S., 63
- Henry, R., 215
 Heras, H., 181
 Heras, H., 201
 Hoppeler, H.H., 63
 Huang, D.-w., 81
- Infante, C., 15
 Ito, E., 89
- Jiang, W., 187
 Jung, J.-H., 104
- Karanth, S., 150
 Kawazoe, I., 104
- Kim, D.-J., 104
 Kim, Y.-C., 104
 Kirkton, S.D., 110
 Kobayashi, S., 89
 Konovalova, S.A., 194
- Laino, A., 181
 Larhammar, D., 166
 Lavarías, S., 201
 Leatherland, J.F., 159
 Li, M., 159
 Linton, S.M., 44
 Liu, C.-L., 208
 Liu, F., 32
 Liu, F.-s., 81
 Liu, S.-F., 208
 Liu, X., 187
 Lumsden, J.S., 159
 Lundell, I., 166
- Ma, Q., 208
 Machado, M., 15
 Masui, D.C., 24
 Matsuda, Y., 54
 Matsuo, R., 89
 McDonald, M.D., 72
 McNamara, J.C., 24
 Miranda, M.R., 40
 Mohell, N., 166
 Mommsen, T.P., 123
 Morishita, F., 89
 Murphy, R.W., 81
- Nakamura, M., 54
 Niehaus-Sauter, M.M., 8
 Nikiforov, A.A., 194
 Northcutt, M.J., 8
 Nyberg, E.T., 110
- Ochiai, Y., 64
 Okauchi, M., 174
 Ozawa, H., 64
- Pasquevich, M.Y., 201
 Pereira, C.A., 40
 Polakof, S., 123
 Ponce, M., 15
- Rodela, T.M., 72
 Rohrbach, S.E., 8
 Russell, S.K., 159
- Sanjuan, A., 94
 Sarker, P.K., 150
- Savina, M.V., 194
 Sayé, M., 40
 Shick, J.M., 119
 Shirley, A.J., 44
 Soengas, J.L., 123
 Somero, G.N., 119
 Speakman, J.R., 63
 Su, Y.-Q., 208
 Suda, M., 54
 Sun, J., 32
 Sun, Z.-Z., 208
 Sundström, G., 166
- Tagawa, M., 174
 Tang, Q.-S., 208
 Tang, T., 81
 Terwilliger, N., 215
- Uno, Y., 54
- Vandenberg, G.W., 150
 Vázquez-Dorado, S., 94
 Voelter, W., 1
- Walsh, P.J., 72
 Wang, T., 63
 Wang, W., 32
 Watabe, S., 64
 Wheatly, M.G., 8
 White, A.J., 8
 Wu, C., 32
 Wu, Y.-j., 81
- Xie, S., 187
- Yamada, T., 174
 Yang, Y., 187
 Yossa, R., 150
 Yu, J., 32
- Zerolo, R., 15
 Zhang, D., 81
 Zhang, H., 32
 Zhao, D., 187
 Zhao, H., 187
 Zhuang, Z.-M., 208
 Zubatkina, I.S., 194